Chronic Mental Health: Improving Outcomes Through Ambulatory Care Coordination

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Organization:	Southeast Nebraska Behavioral Health Information Network, Inc.
Mechanism:	RFA: HS08-002: Ambulatory Safety and Quality Program: Improving Management of Individuals with Complex Healthcare Needs Through Health Information Technology (MCP)
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Summary: Without electronic communication, behavioral health providers cannot follow the full treatment path of patients with mental health issues as they move between various providers in urban and rural outpatient settings, mental health hospitals, protective custody, and crisis mental health facilities. This project explores how the exchange of health information between rural and urban providers in the behavioral health field can improve ambulatory patient care coordination and safety across treatment settings. Specifically, the project examines provider barriers to technology acceptance in the behavioral health setting, behavioral health care technology acceptance and adoption, and the effects of a health information exchange (HIE) on clinical outcomes.

The development and implementation of a regional behavioral HIE in southeast Nebraska was based on the premise that the HIE would decrease the time it takes for providers to access comprehensive and accurate information, thus creating better access to patient information between and among the provider care team serving an individual with mental illness. This, in turn, would improve continuity of care by providing an electronic link between Nebraska's multiple service settings. The ultimate end for the project would be that through the provision of basic electronic information to coordinate patient care between behavioral health providers, rural hospitals, and the emergency behavioral health system will improve the long-term health outcomes of individuals with serious, persistent mental illness.

During the first phase of the project, the Electronic Behavioral Health Information Network (eBHIN) team issued a request for proposals, researched vendor qualifications, and ultimately selected products from NextGen Healthcare. At the same time, the research team began to design the HIE and conducted a behavioral health provider survey focused on technology acceptance. In the second phase of the project, the team developed the HIE infrastructure, equipped provider offices with new or updated technology, and provided training to participating providers. In the ongoing phase three, the team is implementing the HIE in organizations in Region 5 of Nebraska. Data will be collected to evaluate how timely access to accurate information might improve the quality of care for those experiencing a behavioral health crisis and who have an immediate need for entrance into the emergency behavioral health care system.

Specific Aims:

- Identify provider barriers to technology acceptance. **(Ongoing)**
- Implement an HIE among three major behavioral health provider facilities. **(Ongoing)**

- Collect data on how timely access to accurate information relates to quality of care. **(Upcoming)**

2012 Activities: At the end of 2012, the HIE was live in all of Region 5 with the exception of one health system organization where Ms. Baker and her team are still finalizing the terms of the interagency agreement. Deployment was underway in organizations in Regions 1 and 6; while a readiness assessment of Regions 2, 3, and 4 was completed during the year. By the end of December, there were more than 25,000 behavioral records in the system.

During the year, the project team had some issues with the recruitment of providers for the second and third studies, so they made minor protocol changes that resulted in an increase of their recruitment numbers for the survey of acceptance and use, and interviews with high and low users. By the end of 2012, they had recruited 62 providers who completed a 100-question survey assessing the HIE's ease of use, usefulness, quality of information, timeliness, and accuracy of data. Interviews with high and low users of the system were ongoing at the end of the year. In addition, the project team started reviewing the data on the HIE system usage, and plan to assess logon trends, minutes in the system, and which aspects of the system providers use.

Other research activities focused on manuscript development, including the dissemination of findings from a statewide survey focused on benefits and barriers to electronic sharing of client information that was sent to all practicing behavioral health providers in Nebraska. An article summarizing these findings, Behavioral health providers' beliefs about health information exchange: a statewide survey, was published in the July-August volume of the *Journal of the American Medical Informatics Association*. An article, Electronic health records: eliciting behavioral health providers' beliefs, presenting findings from interviews with 32 behavioral health providers about their beliefs about HIE and electronic health records (EHRs) was published in the *Community Mental Health Journal*.

As last self-reported in the AHRQ Research Reporting System, project progress and activities are on track, and project budget spending is roughly on target. Due to initial project delays in 2009 and the unanticipated amount of time to develop some specifications for the HIE, the team is using the second of two no-cost extensions to ensure adequate time to complete the remaining studies and the subsequent analysis and manuscript preparation.

Preliminary Impact and Findings: Analysis of the statewide survey showed that a majority (67 percent) of providers were positive about the impact of HIE. Most behavioral health providers are supportive of HIE; however, adoption and use may continue to lag behind that of medical providers due to perceived cost and time burdens, and concerns about access to and vulnerability of information.

Themes identified through interviews with behavioral health providers included quality of care, privacy and security, and delivery of services. All providers believed there are benefits to quality of care when using EHRs, while 59 percent of providers noted barriers to their use. Eighty-one percent of providers expressed overall support for electronic behavioral health records.

Target Population: Adults, Chronic Care*, Mental Health/Depression

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

Business Goal: Implementation and Use

This target population is one of AHRQ's priority populations.